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# **Appendix Q**

## **Severe Weather Plan**

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## **SEVERE WEATHER**

### **Purpose**

This Appendix describes Eagle County's Severe Weather Plan. The purpose is to identify procedures to observe and report severe weather events which enable National Weather Service (NWS) forecasters to validate forecasts and make appropriate hazardous weather notifications.

### **Situation and Assumptions**

- A. Severe weather events will occur in Eagle County.
- B. Trained weather spotters can provide early warning of actual or potential serious weather conditions.
- C. Local spotter reports are critical to the NWS office in Grand Junction.

### **Concept of Operations**

- A. Weather spotters are local individuals trained by the NWS to provide essential information for all types of weather hazards. The main responsibility of a spotter is to identify and describe severe local storms.
- B. Weather spotters will be activated by the NWS Grand Junction forecast office when severe weather is imminent. Storm spotters are notified of the need for storm awareness and reports via indirect resources, such as the daily Hazardous Weather Outlook and the Area Forecast Discussion.
- C. Severe weather observations will be reported to the NWS Grand Junction anytime severe weather conditions are observed.
- D. When severe weather approaches, every practical means will be used to further disseminate warnings issued by the NWS for Eagle County or portions thereof. Practical means may include, but are not limited to activation of the Emergency Alert System, Community Alerts through the Aspen/Pitkin and/or Vail Public Safety Communications Centers, informational announcements on public safety radio networks, and use of social media.
- E. Reportable weather conditions to be relayed to the NWS Grand Junction office are identified later in this document.

### **Communications**

- **Emergency: 911**
- NWS Grand Junction
  - Telephone: 970-256-9463 (unlisted)
  - Administrative Line: 970-243-7007
  - FAX#: 970-257-0452
- Vail Public Safety Communications Center
  - Telephone: 970-479-2201
- Pitkin County Regional Emergency Dispatch Center
  - Telephone: 970-920-5310

- Public information and warning functions will be conducted in accordance with Appendix L of this plan.

### **Spotter Safety**

- A. If spotting away from home:
  - Select a point for observing that offers a combination of reasonably unobstructed view and maximum protection.
  - Conduct field inspection, keeping in mind to avoid hazards produced by heavy rain, hail, lightning, wind, or tornadoes.
  - Always allow for an escape route.
- B. Review safety rules for:
  - Lightning and thunderstorms
  - Flash floods
  - Winter Storms
  - Tornadoes
  - Reduced visibilities in heavy rains, blizzards, etc.
- C. Travel with a spotter safety/survival kit
- D. Do not cross water-covered roads and do not attempt to outrun a tornado.

## **REPORTABLE WEATHER CONDITIONS and PROCEDURES**

### **What to Look For**

- Heavy rain at the rate of one inch per hour or greater
- Any flooding, including flash flooding, street flooding, or river/stream flooding
- Hail, any size, but of importance are stones  $\frac{3}{4}$  inch diameter (penny sized) or larger
- Wind greater than 40 mph, but of importance is wind stronger than 50 mph
- Significant damage to structures
- Large trees down
- Tornado or funnel cloud
- Rotation around a vertical axis near the thunderstorm base, known as a wall cloud.
- Evidence of dust or debris cloud from thunderstorm wind
- Snowfall greater than two inches per hour.
- Avalanche
- Road closures due to snowfall or mudslides/rockslides
- Reduced visibilities in dense fog, dense smoke, blowing dust, or blowing snow, etc., with estimated visibilities below 1 mile

### **Reporting Procedures**

- A. Report observations to the NWS Grand Junction
- B. Provide the following:

- WHO you are: spotter name
  - WHAT you observed: type of phenomena
  - WHEN it occurred: exact time of observation
  - WHERE it occurred: direction and distance from known location; movement and speed of phenomena, etc.
  - Are there INJURIES and/or DAMAGE
- C. Avoid vague observations such as “raining real hard,” or “it is blowing hard”

### ESTIMATING WIND SPEED AND HAIL SIZE

Wind Speed (MPH)	Description
25-31	Large branches moving, flags beat and pop, whistling heard in overhead wires
32-38	Whole trees moving, inconvenience walking against the wind
39-46	Small branches (twigs) break, impedes walking
47-54	Slight structural damage, larger branches & weak limbs may break, shingles blown from roofs
55-63	Moderate structural damage and some trees blown down
64-72	Heavy to severe structural and tree damage
73-112	Peels surface off roofs, windows broken, trailer homes overturned, many trees blown down or snapped off

<u>Hail Reference Size</u>	<u>Measured Size</u>
Pea	0.25"
Penny	0.75"
Quarter	1.00"
Half Dollar	1.25"
Ping Pong Ball	1.50"
Golf Ball	1.75"
Hen Egg	2.00"
Tennis Ball	2.50"
Baseball	2.75"
Grapefruit	4.00"
Softball	4.50"